

AN
 INAUGURAL DISSERTATION
 ON
HEPATITIS,
 SUBMITTED TO THE CONSIDERATION
 OF THE
 HONOURABLE ROBERT SMITH, PROVOST,
 AND OF THE
 REGENTS OF THE UNIVERSITY OF MARYLAND
 BY
M. ROWAN,
 OF KING GEORGE COUNTY VIRGINIA.

Spelunca alta fuit, vastoque immanis hiatu
 Scrupea, tuta lacu nigro, Nemorumque tenebris,
 Quam super haud ullae, poterant impune volantes
 Tendere iter pennis, talis sese halitus atris
 Faucibus effundens ad super convexa ferebat
 Unde locum Graii dixerunt nomine Avernum
 Virg. Æmeid Lib: VI:

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PREFACE.

NOTHING but compulsion could induce a man, who is conscious of his own incapacity in composition, and whose natural inability has been increased by extreme bad health, to offer to the public this imperfect dissertation. The time engaged in attending a full course of lectures, as well as some private ones too, necessarily leaves not many leisure moments to the student: But when ^{bad} health and a rigorous season are united, I hope the invalid is entitled to the indulgence of the learned professors, and the candid and liberal reader.

"Non recito cuiquam, nisi amicis, idque coactus."

HOR.

To Elisha De Butts, M. D.

*Professor of Chemistry in the University
of Maryland.*

SIR,

It is always due talents, to manifest our respect and consideration for them, but when they are combined with strict probity and integrity, surely the possessor is entitled to public patronage and the approbation of the medical student. Impressed with these sentiments, permit me to dedicate to you the following imperfect Thesis, and that you may live long and prosper, and bestow those happy qualities of the head and heart, on those who may hereafter attend Chemical Lectures in the University of Maryland, is the wish of your humble servant.

M. ROWAN.

INTRODUCTION.

THE general fact, that heat produces an expansion of all bodies, and that, in proportion to its temperature, whereby the particles of substances exposed to its influence, are so far removed, as to assume the various grades, to be found between the ordinary effects of expansion, and the gaseous forms, is well known to the learned. But the motives for having assumed *Hepatitis*, for the subject of my dissertation, and endeavouring to shew the influence of Miasma, in the production of that disease; render it necessary that I should offer a few observations, on the subject matter of heat. The controversy between the English and French Philosophers; whether bodies were rendered heavier or lighter, when exposed to heat; has I believe been decided, in favour of the former. Messrs. Muschenbroek and Buffon were of the opinion, that heat was ponderous, and that bodies subjected to its action acquired additional weight; building their opinion on the fact; that according to some experiments they found, that when a given quantity of metal, had been submitted to a higher degree of heat; the calx

which remained on cooling, was found to have acquired weight ; which, consequently led them to the above induction. This has been ably refuted by Messrs. Whitehurst and Roebuck, who proved that the experiments of those gentlemen were fallacious, and as to the augmentation of weight in the calx, they justly ascribe it to the oxygen, for which the metal had a powerful affinity, when heated up to ignition. It is obvious from those as well as other considerations ; that heat, is a subtile and self repellent matter, easily penetrating every body in nature in a greater or less degree, According to their comparative densities ; and by the resolution of their elementary principles, bodies have sometimes acquired deleterious properties, which, in a state either, of natural or chemical combination, might have remained innocuous to animal life. From what is here said, it is obvious, that heat induces water to assume its aeriform character ; and combined with other collateral causes, produces the various phenomena, in all those diseases, produced by miasma, which affect the human race, in tropical climates. I say collateral causes ; for heat uncombined with moisture and vegetable decomposition, will not produce diseases, (but in a comparative degree to those,) which will be found in the opposite conditions. In confirmation of those opinions, we have many proofs and well authenticated facts, that even under the torrid

zone where the atmosphere is excessively hot but dry ; the inhabitants arrive to a great age, and a modern writer of * the highest character asserts, that in Carracas, Chili and the burning plains of Cumana the inhabitants enjoy great longevity ; and instances some cases of people attaining the extraordinary age of one hundred and forty-nine. But in the same latitude and climate, near the waters, where the air becomes imbued with moisture, and deleterious exhalations ; the very converse of this takes place. By chemical analysis, as well as synthesis, modern philosophers have sufficiently proved, that water, is composed of Oxygen and Hydrogen in the proportion of 85 of the former to 15 of the latter in the 100. Its specific gravity is supposed, according to Chaptal to be, to Atmospheric air as 84 to 1000, owing to the levity of which, according to the same author the ingenious and curious, are enabled to accomplish their aerial voyages. Their balloons being filled with the Hydrogen gas which is twelve times lighter than the common atmosphere ; It continues to ascend untill it is in equilibrio with the atmosphere above.

From the quantity of vegetable matter held in solution, by water, from the decomposition it undergoes by the heat of the sun, and the diminished specific gravity of Hydrogen gas to all the other fluids ; have we not rea-

* Baron Humboldt.

son to conclude that the caburretted hydrogen gas, is the most active ingredient in what we call miasma.

Having said so much of the predisposing causes of Hepatitis, it is necessary I should say something of the liver and its anatomical relations to other parts. It is the largest viscus in the human body, situated in the abdominal cavity, the larger lobe occupying the epigastric and right hypochondriac regions. In the foetus, or when that viscus is preternaturally enlarged; it occupies the ~~left~~ ^{right} hypochondriac. Generally the morbid enlargement of this organ seems to be peculiarly consecutive, of the intermitting and remitting bilious fevers; although, it is often to be met with in shattered constitutions, from other causes; especially from the immoderate use of spirituous liquors. Without going into minute divisions of this body, suffice it to say, that it is kept in close contact with the diaphragm, by the reflections of the peritoneum; a membrane which envelopes the whole abdominal cavity. Those appendages, which connect the liver, to the vertebra, sternum, and other parts, receive the name of ligaments; by means of which as well as the abdominal muscles, the liver is retained in its natural position. Owing to this contiguity of parts, we are enabled to account for those symptomatic affections, which we find frequently accompanying diseases of that organ. Hence

medical writers in every country, mention pains in the clavicle and shoulder, as pathognomonic symptoms of schirrous and inflamed liver. As to its physiological history, I have little to say, except the known peculiarity of its circulation; The Venaportarum fulfilling the office of an artery, but at the same time divested of some of its characteristics, viz: carrying the blood from the lower part of the body, with the equability of a vein, whereby that organ, according to its own laws, elaborates, and secernes, that essential fluid which we call bile. I shall not trouble the reader with the different opinions of physiologists, as to what particular vessels are engaged in the biliary process, as it could have no influence in the mode of treating diseases of that organ, but content myself with the experiments and opinions of a writer, of the highest authority,* that the bile is prepared from the venaportarum and its branches, and that the hepatic artery is not engaged in that function; it furnishing blood to the body of the liver, as the bronchial arteries do to the lungs, and the coronary arteries to the heart. Hepatitis, by all writers, has been admitted to be, generally, a disease of hot countries, and to be distinguished into acute and chronic epithets, which are only expressive of its various degrees. Of this, more hereafter. It is said, that adults are more subject to it, than those

* Saunders on diseases of the liver.

under puberty.* Among the causes as laid down by Cullen, Saunders, and Wilson, are, passions of the mind, cold, heat, contusions of the body, but especially of the cranium, and the free use of spirituous liquors. Dr. Cleghorn, in his treatise on the diseases of Minorca, says, that on that island, tumefied spleens and livers, are to be frequently met with, not only in men, but in brutes. Dr. Wilson asks the question, is the frequency of this disease in both the Indies, to be ascribed to the great quantity of pepper, which is used in those countries? It may not be at all improbable, that the free use of this condiment, by its excessive stimulating quality, with other secondary causes, exalts and heats the juices of the animal body, and produce it, on the same principles that ardent spirits do. But why may we not impute it to an origin more obvious, and in my opinion, more reconcileable, to the laws of physic? viz: miasma. I anticipate in this place, two arguments, which may, perhaps, be adduced against me. First, that if, carburetted hydrogen gas, which, I deem to be the chief active ingredient in miasmata, be instrumental in the production of hepatitis, why do we not find those philosophers and chemists, who spend the greater part of their lives in

* Dr. Girdlestone says, that whilst the soldiers were seized with this complaint, (Hepatitis,) the drummers and fifers, who were under age, although equally exposed to fatigue and the heat of the sun, seldom suffered from it.

laboratories, decomposing this, as well as every other gas, affected with a similar disorder? this argument, does not in the least operate against my opinion ; for those other constitutions of the general atmosphere, are not acting on those gentlemen, alternate heat and cold, moisture and night air. Secondly, that in the analysis of pestilential airs, chemists have not been able to detect what particular gas contained this noxious matter ; which of them have the greatest affinity for it, or finally, in what the morbid matter consisted? This, so far from militating against my opinion, favours it. Who will have the hardihood to contend, that although the philosopher has not been able to make any discoveries, there does not exist, in the mean time, some subtle poison in the atmosphere? Who has been able to ascertain the constituents of that poison, which produces small-pox, measles and plague? and because it cannot by analysis, be brought under the purview of our senses ; are we to reject the hypothesis, which leads almost to a thorough conviction of their existence? Reasoning then, *a priori*, may we not justly conclude, that there exists something of a peculiar nature, in the atmosphere of those regions, which almost exclusively produces inflammations of the liver? and that this can be nothing else but miasma, modified and influenced by other agents, and acting on the body generally, and on the liver with peculiar

force? This disease demands our serious consideration, and it is a matter of surprize that a complaint with which we are generally afflicted, should be so imperfectly understood. Dr. Potter, to whom I am indebted for some of my ideas on this subject, informs us that he has seen more errors committed in the treatment of this disease than any other that ever came within his notice. This may be owing to a want of sensibility in the liver, which does not readily take on inflammation, as the other viscera of the body are apt to do ; hence the disease is not recognized, and of course practical errors follow. In a former part of this essay, I have mentioned acute and chronic hepatitis.* The former we are told generally exists when the convex surface of the liver is the seat of inflammation ; the latter when the concave side is affected. But to those, there are many exceptions.† Among the causes as men-

* The Chronic Hepatitis is a less dangerous disease than the Acute, if it be not neglected till a tendency to supperation takes place, then the prognosis is the same.

Wilson on Febrile Diseases.

† Dr. Lind, in his account of diseases incident to Europeans in warm climates, observes that the livers of those who died of chronic Hepatitis, was sometimes so eaten through as to resemble a honeycomb.

Bontius in his observations on the dissections of dead bodies, as stated by Dr. Wilson, relates cases in which there was found no appearance whatever of the liver, but in its stead, a membrane resembling a sack, containing a sanious like fluid, the patient had for some time before death expectorated matter of light nature. Other writers give us similar accounts, but the matter passed by stool.

tioned by every writer, on diseases of the liver, is cold. Let us advert to this alledged cause, and see how it will enable us to account for those obstructions and morbid enlargements of the liver. If it was the consequence of cold simply, would we not find the lungs, pleura, trachea &c. the seat of a similar disease, or at least participating in it? Would we not find pleurisies, catarrhs, pulmonary affections and rheumatisms, and all the other diseases which result from the simple abstraction of heat, or of heat and cold alternating with each other? From this, I wish not to be understood as excluding the agency of cold in the production of this complaint; what I wish to establish is, that it is a secondary cause, and miasma a primary one. In every age and country, writers have justly, in my opinion, ascribed the intermitting and remitting bilious fevers with many others, to certain states of the atmosphere; and is it not strange, they have never hinted a word of the same conditions of air operating on the liver? Do we not meet with this disease, almost universally, in those latitudes where miasmata exists; viz. in both the Indies, coast of Africa, South America and in some parts of the United States? It is said that it is the consequence of intermitting and remitting bilious fevers. But why may we not consider it as an *indispathic* rather than a symptomatic disease? What evidence have we but popular opinion, that it always is the

consequence of those last mentioned diseases? We are informed, according to many writers, that the acute and chronic hepatitis are convertible into each other, and although this may be true, no peculiar remedy belongs more exclusively to one than the other, but to be used according to the ratio of their violence. From the slow but insidious course of this complaint, either through ignorance or inadvertence in the practitioner, the grand remedies are withheld, 'till a disease is established, which holds so distinguished a rank in the catalogue of our sufferings. As I do not pretend to make remarks or suggest remedies which have not been already duly considered by the learned faculty, and knowing as I do, that this essay, imperfect as it is, will be read by some who may derive advantage from it; I shall proceed to say something in the way of cure.

We have reason to regret that the chief remedy, bleeding, is either altogether or too long withheld, in those complaints arising sometimes from the obscurity of the disease, but also, too often from the prejudice of the patient or practitioner to this operation. With due deference to the opinions of others, there is not a climate on the globe that will bear, or requires the lancet with such freedom, in the removal of its diseases, as the United States, a climate sometimes shewing great contrasts of temperature, whereby the functions of the body are deranged, but especially

that of the skin. The well known reciprocal influence of matter acting upon the external and internal surfaces of the body, we find is exemplified in various ways. The glow on the skin by a meal or cordials, the sensation of health and comfort which every one must have felt by a change of fresh garments, by the effects of a humid atmosphere on our tempers and mental faculties, are I believe experienced in a more or less degree by every one, and on it depends many physiological as well as pathological phenomena. When we consider the physical happiness of this country, the great and extensive resources of the mass of its inhabitants, contrasted with those of Europe and other countries, as well as the propensity of man to those excessive indulgences which the vice of his nature or habit so strongly leads him to, we need not be surprized to find him doomed according to his indiscretions, to all the diseases in the box of Pandora. From what is here said, it is evident that mostly all the complaints, from such remote and proximate causes, especially in the incipient stage, will be generally inflammatory in their character, and demanding venesection. It is well known that young practitioners of our science when first making their essays, are governed too much by rule and theory, in the use of the lancet and other remedies, not considering the great change and modifications the disorder may undergo in a few hours, owing to

the great evaporation from the surface of the body especially in warm climates, (and in our own in the hot seasons of the year) whereby the symptoms of the disease are mitigated, but enough remains to cherish a series of chronic indispositions. Had bleeding been sufficiently premised, nature and art would have been enabled to triumph, (and to say the least) the individual spared from a long and loathsome valetudinary existence. Dr. Caldwell of Philadelphia, in some of his tracts, remarks that it is impossible for the European physicians to prescribe correct rules of cure, whilst ignorant of so many of the physical causes which exist in our country ; with which opinion I certainly concur. For, without sagacity and a due apprehension of causes, our practice will be empirical and doubtful. I come now to treat of more of the practical part of this subject, in which I hope to be able to reconcile and prove the agency of miasma producing inflammation in the liver upon the ordinary and established laws of diseases of that character. To minds viewing the subject cursorily, it would be thought that as this complaint prevails in countries where all the train of bilious and intermittent fevers exists ; and that great debility attends those as well as all other complaints incidental to those places, that such places would not be favorable to the production of

inflammatory complaints and of course that they seldom existed.

But let us attend more strictly to the laws of nature, and from this one circumstance learn, how from false premises, erroneous practices unfortunately follow. The old theory of increased circulation of a powerful impetus in some of the blood vessels, while others are in a natural state, as if it was compatible with the laws of physiology, that one set of vessels would be bursting their walls by the velocity of their contents, whilst others would remain undisturbed and fulfil their healthy and natural offices ; how could this happen ? Do not all the vessels emanate from the heart, that common fountain from which every artery and vein is filled according to their respective areas, and transmit their contents to their destined places according to the general laws of the vascular system. Let me now endeavor to solve the question on the principles of the modern doctrine, by which it will appear that inflammation can be produced by miasma as well as other causes. The phenomena of inflammation evidently shews that there exists a congestion or turgescence in the inflamed part, and that this is caused by the small or ultimate branches giving way to the ordinary force or vis a tergo in the great arteries. Miasma which we know to be debilitating becomes a remote cause of Hepatitis, whereby the smaller vessels give way, and inflammation in

various degrees (modified no doubt by other contingent causes) follows. Hence, bleeding so as to diminish the blood in the large vessels whereby the irritating cause will be removed from the small ones, is the indication of cure. Hence we find that tonics and astringents, as they are called, cure hemorrhagies, if the volume from behind be not too great. Upon what principle of pathology can we explain the hemorrhagies which we often see take place in those diseases called malignant plagues, confluent small pox, and the petechiæ or red blotches which we discover in many diseases of our own climate as certain precursors of death, but such a one as here noticed? That this induction is sufficiently proven by the established mode of cure, viz: by wine, bark, and every other tonic of the vegetable and mineral kingdoms which the patients stomach can conveniently digest. But to follow this subject any further would not accord with the intention of this dissertation. I have said enough to prove that Hepatitis is produced by miasma, and that inflammation is as natural a consequence of marsh exhalation and hot sun in that organ, as pleurisies and rheumatisms are of alternate heat and cold. I shall forbear recounting all the diagnostic symptoms as laid down by writers on this disease, and content myself with noticing a few of them, whereby it will be perceived that I have attended to its most essential and principal cha-

racteristics, and by which I will be able to discuss it as succinctly as possible.

Like every other inflammation, it attacks more or less suddenly. A tightness about the precordia, anxiety, fever, sickness of the stomach, and all the other signs of a general pyrexia, in various degrees, and owing to its being slow in its progress, and often mistaken for other affections especially for those of the stomach; it is either overlooked maltreated or neglected * The termination of this like every other phlegmasia is either by resolution, suppuration or gangrene, Lieutaud speaking of the acute kind says, when by resolution it will be in two or three days time. But I am satisfied he is incorrect in this, as I have witnessed more than once myself. It will be recollected that the liver diaphragm, and lungs, are in close contact; and that from their anatomical relations, there is every cause to fear, the two latter will be secondarily affected, if the inflammation is not arrested. Dr. Cullen does not enumerate schirrous liver as one of the terminations of Hepatitis; it has however been proved by Dr. Saunders and Dr. Wilson, that it is often the consequence of the chronic

* Dr. Potter says, a rule by which Hepatic affections may be distinguished from other diseases, arises from the influence, the liver exerts upon the intestinal canal. There are very few cases of this disease in which the alvine excretions are performed with due regularity. Alternate constipation and looseness almost always attend a state of hepatitis.

state, but that its symptoms are so equivocal that its presence is not always ascertained with precision. The learned and ingenious Dr Wilson doubts, whether chronic Hepatitis and schirrous liver can be often distinguished ; in as much as the first precedes the other and vice versa. And it is a matter of surprise to find men of such high authority discussing trivial points, when the mode of treatment is precisely the same, the above writers and many others, take notice of the lowness of spirits which generally accompanies this disease ; to relieve which, the invalid has recourse to spirits or wine to dissipate his gloomy thought. That the observations are true and the alternative a baneful one I can attest from personal experience. "*haud ignara mali miseris succurre disco.*" According to some writers, it assumes the appearance of a dysentery * and Dr. Saunders in his treatise on diseases of the liver, makes the following observation. " I am inclined to believe that the chronic inflammation of the liver, is more frequently mistaken for a dyspeptic state of the stomach ; and I have seen many cases of this kind, which have been supposed to arise from indigestion, the patient generally complaining of pains and uneasiness, which he falsely ascribed to the stomach ; and its continuance is so short, that no apprehensions are entertained respecting the future health of the person."

* Girdlestone.

The writer from which I have taken this quotation has been surely a correct observer of nature and in his directions as above, he is strictly correct for I, whom this disease for sometime past has afflicted, can attest the fact and no person who is in the least acquainted with Hepatitis can be long engaged in practice without seeing the above observations verified. I shall not recapitulate here, what has been said, as to the propriety of bleeding in this disorder, but once more insist for reasons given before, that if it be omitted the patient as well as the practitioner will have cause to regret an error, which sad experience will teach them cannot often be recalled. It has been a matter of doubt with writers which of the carthartic class is most eligible. Dr. Lind is of the opinion that the neutral salts are preferable, and Dr. Girdlestone says, that he found calomel in small doses aggravated the disease. It is true it requires great reputation or an extraordinary good opinion of the public to offer with a prospect of success our ideas on any subject, but it would savour of presumption and arrogance, for a tyro to set his opinions in opposition to those authorities. But let it be recollected that those who write handsomely and elaborately do not always write correctly. I can bear ample testimony to the incorrectness of the latter assertion; and on the other hand can bear witness to the bad effect of large doses of calomel, particularly if often

repeated, they injure the tone of the stomach and often augment the disease which they were intended to remove. The able professor of the Chair of the practice of Physic, Dr. Potter, informs us that it does not in proportion to its bulk and quantity operate as a cathartic and is decidedly in favour of smaller doses as safer to the patient and more likely to produce the intentions in view. The learned professor of anatomy, Dr. Davidge, in his private course of lectures, which I attend with pleasure and from which I derived information, inculcates a similar doctrine. To those may be added the authorities of Dr. Wilson and Dr. Cleghorn in support of the efficacy of that invaluable medicine, calomel; which now justly deserves the high commendation of the modern practitioner. We are informed by writers that where the mercury was given by the mouth, the gums became hard; that troublesome ulcers attended with copious spitting, whereas from friction, ulceration came on very slowly, the gums redder but softer and spitting more easy, and we have the authority of Dr. Rollo in his work how to preserve health in the West Indies; that the external use of mercury, was more efficacious in curing Hepatitis, than calomel taken internally. It is generally, I believe remarked that when exhibited by friction it produces a more copious spitting, with less painful affection of the gums, than the internal use of it. However all writers as far as

I have read, concur in the opinion that impregnating the body so as to produce slight soreness or a spitting kept up for some time according to circumstances, will answer every end which we wish. The nitric acid has been highly spoken of (either alone or as an adjuvant to mercury) as a valuable remedy in this disease, especially in both the Indies, and probably deservedly, as it is a tonic and affords much oxygen, which strongly, in my opinion recommends it to the notice of practitioners in those climates where the excitability is perpetually acted upon by the excessive heat of the sun. Blisters have happy effects in this complaint and ought seldom or never to be omitted. But when we have failed with all our medicines we have one alternative to recommend which is oftentimes adequate to a cure, viz: change of place or climate. The ancients seem to have been duly aware of its efficacy in all obstructions of the viscera, for we find Celsus recommending the "cœli mutatio," by which I presume he means change of climate. May it not be more efficacious in those than in rheumatisms, pulmonary diseases, asthmas, and others of hereditary taints,* from which the modern practition-

* I have known inveterate lues venerea, especially when seated in the glandular part of the body that could not be subdued by any medicine in England, to yield to the climate of the West-Indies without any medicine whatever.

Mosely on Tropical Climates.

er calculates so much good? does not the cause exist in the atmosphere which we inhale, as I have already endeavoured to shew, and altho' medicines will do much, towards the removal of diseases, yet it must be regretted, that we are often foiled in our attempts to cure with them. That medicines will do much, in acute diseases is readily conceived; but how it will change the nature of a climate or the peculiar constitution of a body to which it is obnoxious, is to my understanding not very clear. Dr. Mosely, in his learned and elegant treatise on the climate of the West Indies, mentions the extraordinary influence of that climate, not only on the human race, but on the lower animals. When men first arrive in those countries he informs us, that such is the peculiar stimulus of the climate, operating on their excitability, that those from obscure origin in European countries, acquire oftentimes an expansion of soul, which is truly surprising. They become endowed with refined sentiments, and it is common to see contentions for precedences, duels from punctilio, and every other etiquette of honor, obstinately insisted on; by men who, but a few years before, filled some servile office, in which they acted with ignorance, but at the same time with integrity; and to use the expression of the writer they ripen in the sun. I have mentioned this sentiment, with a view to shew, that even a change to a country or place not

so healthy as our own (for a time at least) often produces happy consequences. If this be the case what effects may we not expect it to produce when the removal is to a healthy place. I shall now say something respecting a proper regimen, and although I do not expect to find advocates in those, at least in many of them, who are either afflicted or predisposed to diseased viscera, yet candor and conviction of its utility induces me to recommend, for sometime at least, abstemious living. I am well aware of the vulgar opinion, that the most regular and temperate die, as soon as the contrary habits in sickly climates. But I aver from my own knowledge, and what I have learned from the observations of my friends and acquaintances, that those who drink nothing but water, or water and molasses and such mild drinks in those diseases, enjoy the best health. That there may be some exceptions with whom such strict temperance might not succeed, is not impossible ; but as they are exceptions to the general rule, they offer no just objections to my injunctions. The consequence of drinking ardent spirit is, that the desire of it increases, whilst the exhilarating effect diminishes ; and hence the strong impulse to a repetition of the dose. A man who is induced either from inclination or necessity to drink spirits or wine ought to keep a jealous eye on his measure ; that once violated,

his palate becomes vitiated, and if reason be not exerted to prevent, it will be found seldom equal to the task of correcting a habit established on the ruin of fortitude and sometimes of character. Considering this disease as we are compelled to do, (a tropical complaint) we may draw the moral inference and consider the happy dispensations of providence, in apportioning his bounties to the inhabitants of the different parts of the globe, endowing those of the cold regions and sterile soils, with the invaluable bloom of health, whereby their scanty and frugal subsistence becomes more than equivalent to the riches of those laboring under the odious contrast of the train of diseases which oppress the inhabitants of the torrid zone, who having every earthly enjoyment, but health alone within their reach, envy those who breathe a more salubrious air, heave the sigh of sickness and sorrow and denounce all the incentives which led them to a place where they "spend their few, but bitter days," and emphatically exclaim in the language of the heathen writer "*quid non mortalia pectora cogis, auri sacra fames.*" "O cursed thirst of gold, how irresistible thy sway over the human heart."

Before I close my Essay, permit me gentlemen, to acknowledge the sentiments of gratitude I feel for the civil and polite attentions received of you individually, and the information derived of you collectively, as

professors of this institution. I fondly anticipate the day when this University, under the auspices of its present Professors and superintendants, will rival the older schools—when the college of Maryland will hold a distinguished rank in the records of future medical history—where the true principles and practice of the different departments of the science of physic are ably taught, and the dogmas of ignorance and prejudice consigned to oblivion.